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In reply, please refer to:
File:

MEDICAL ALERT

January 15, 2004

Dear Hawaii Healthcare Provider:

SUBJECT: **RESURGENCE OF SYPHILIS IN HAWAII**

The incidence of syphilis has increased substantially in Hawaii over the last few months with twelve infections reported during November-December 2003. The majority of these infections have been identified among men who have sex with men (MSM). Seventy- three percent of persons recently diagnosed with early syphilis are co-infected with HIV.

Private health care providers have diagnosed almost all of the recent syphilis infections. The Hawaii Department of Health (HDOH) is therefore asking for your continued assistance in screening at-risk populations and for promptly treating and reporting syphilis infections identified within your practice.

Screening of populations at risk, coupled to timely, appropriate medical management of patients and their partners is critical for preventing serious morbidity and stopping the spread of syphilis. Detailed recommendations for diagnosing, treating and counseling patients with syphilis are contained in the attachment. Major points include:

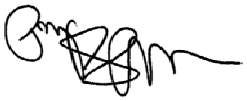
1) Clinicians should routinely inquire about the sexual behaviors of their patients to better assess patients' risk.
2) Gay or bi-sexual men who are not in a mutually monogamous relationship should be screened for syphilis and other sexually transmitted diseases (STDs) and HIV every 6 months. Screening may be more frequent for those who use illicit drugs, engage in commercial sex, or have high rates of sexual partner exchange, which is sometimes facilitated via the internet.
3) Asymptomatic, at-risk patients should be screened using the RPR or VDRL tests. The FTA-ABS or MHA-TP test should be ordered for all symptomatic patients and any patient who has had sexual contact with someone diagnosed with syphilis.
4) All patients with a history of recent (i.e. within the past 3 months) sexual contact to someone diagnosed with syphilis should be prophylactically treated irrespective of serologic test results since the RPR or VDRL may occasionally be falsely negative early in infection.

5) Syphilis may increase the risk of HIV transmission. All patients diagnosed with syphilis or another STD should be serologically tested for HIV infection and, conversely, those infected with HIV or AIDS be tested for syphilis and other STDs.
6) Syphilis is a notifiable disease and should be reported to HDOH by calling 808-733-9281 or FAXing at 808-733-9291. Disease Intervention Specialists (DIS) are available to assist providers with patient education and counseling of partners. For all reports of syphilis, a DIS will contact you and your patient to obtain information needed to ensure sexual partners are identified and referred for care. HIPAA[2] regulation does not require patient's consent to report syphilis infections or other notifiable diseases to HDOH.

To download an algorithm on the medical management of primary and secondary syphilis you may visit www.stdhivtraining.org/cfm/resources.cfm. If you would like a copy of the algorithm sent to you or have any questions about this advisory, please call Roy Ohye or Venie Lee, STD Prevention Program, at 808-733-9281

Thank you for your continued support in the prevention and control of STDs in Hawaii.

Sincerely,



Paul V. Effler, MD, MPH
State Epidemiologist

1. SYPHILIS TRENDS IN HAWAII:

Syphilis is a serious infectious disease that may increase the risk of HIV transmission and may cause serious complications in HIV-infected persons. Hawaii has seen a steady increase in infectious syphilis cases in recent years; the number of syphilis infections reported per 100,000 population was 0.6, 1.5, and 2.6 for 2000, 2001, and 2002 respectively. Data for 2003 are not yet finalized but so far 21 infections reported; although this figure is less than that reported in 2002, HDOH is concerned because a majority of the infections in 2003 occurred in just two months, potentially signaling an outbreak. Increases in syphilis have also been seen nationally and outbreaks of syphilis among MSM have been reported from California, Washington State, Chicago, New York, and other locations. Reasons for the resurgence of syphilis include unprotected sex and a large number of sex partners, many of whom are not locatable.

2. EPIDEMIOLOGY OF THE CURRENT CASES:

Of the 21 early syphilis cases reported in 2003 to date, 12 (57%) early syphilis infections were diagnosed between November 14 and December 20, 2003. This compares with 4 (13%) of 32 infections reported during the same time period in 2002. The latest 12 early syphilis cases reported are among men who have sex with men (MSM) or bisexual men. Eight of 11 (73%) of these cases are co-infected with HIV. Three of the 8 (38%) were diagnosed with HIV in 2003 and the other 5 cases (63%) were previously diagnosed between 2-17 years ago. Co-infection of HIV and syphilis presents a major concern for prevention and control activities of HIV and syphilis infection in Hawaii.

3. MEDICAL MANAGEMENT OF PATIENT WITH SYPHILIS

The medical management of patients with syphilis is determined by the clinical stage of infection. Because appropriate staging is critical for determining the optimal course of therapy, clinicians may wish to consult an infectious disease physician or HDOH for assistance.

Clinical Stages:

Primary syphilis usually presents as a painless ulcerative lesion (chancre) in the mouth, genitals, perineum, or anus - with or without regional lympadenopathy. Primary syphilis has an incubation period of 3 weeks to 3 months.

Secondary (disseminated) syphilis classically presents as a copper-colored maculopapular rash widely distributed on the trunk, extremities, and particularly on the palms and soles, usually 2 to 8 weeks after primary infection. The primary chancre may or may not be present. Additional findings in secondary syphilis may include alopecia; highly infectious mucous patches on the lips, oropharynx and genitalia; condylomata lata; generalized lymphadenopathy, especially epitrochlear adenopathy; fever; arthralgias; malaise; anorexia; weight loss; pharyngitis, laryngitis, aseptic meningitis and anterior uveitis.

Latent syphilis is the stage of the disease where there are no clinical manifestations of syphilis. Latent syphilis acquired within the preceding year is referred to as **early latent syphilis**. All other cases of latent syphilis are classified as either late latent syphilis or syphilis of unknown duration.

Late (tertiary) syphilis is a term used to describe infections which manifest with serious sequlae including chronic neurosyphilis, cardiovascular syphilis, ophthalmologic lesions or localized gummatous lesions.

Treatment of Syphilis

Long-acting benzathine penicillin is the drug of choice for treating most stages of syphilis. The alternative regimens listed in Table 1 may be used; however, close follow-up is essential because data on non-penicillin regimens for the treatment of syphilis are limited – particularly for treating patients co-infected with HIV. There may be a higher risk of treatment failure when using alternative regimens.

The Department of Health can arrange delivery of benzathine penicillin, at no cost to providers, for patients infected with syphilis and for their partners by calling a Disease Intervention Specialist (DIS) at 808-733-9281.

For all cases of syphilis, a follow-up serologic test for syphilis is essential to ensure adequate response to treatment. Follow-up RPR or VDRL tests should be done at 1,3,6,9,12 and 24 months after treatment. Clinical re-evaluation to ensure rapid resolution of signs and symptoms should be done at 1 week, and at 2–4 weeks after treatment. It is important to emphasize to the patient that resolution of signs and symptoms does not imply successful treatment, hence follow-up serologic tests are necessary.

Table 1. Treatment regimen for syphilis

Clinical Stage	Treatment of Choice[a]	Patients Allergic to Penicillin[b]
Primary, Secondary, Early Latent [C]	Benzathine penicillin G 2.4 million units IM in a single dose	Doxycycline 100mg orally twice daily for 14 days Tetracycline 500 mg four times daily for 14 days Ceftriaxone 1 gm daily IM or IV for 8-10 days. Azithromycin 2 gm orally
Late Latent, Syphilis of unknown duration, Gummatous and Cardiovascular Syphilis	Benzathine penicillin G 7.2 million units total, administered as 3 doses of 2.4 million units IM at 1-week intervals	
Neurosyphilis	Aqueous crystalline penicillin G 18-24 million units per day, administered as 3-4 million units IV every 4 hours for 10-14 days	Procaine penicillin 2.4 million units IM once daily PLUS Probenecid 500 mg orally four times a day, both for 10-14 days

a. IM= intramuscular, IV= intravenous; mg= milligrams; gm= gram
b. Penicillin desensitization is recommended for patients having true penicillin allergy and neurosyphilis along with consultation with an infectious diseases expert. Penicillin skin testing may be helpful.
c. Primary, secondary and early latent syphilis are very infectious stages of the disease. Transmission of syphilis is most likely to occur during these early stages.

4. SCREENING YOUR PATIENTS FOR SYPHILIS

Clinicians should routinely inquire about the following behaviors to better assess their patient's risk of syphilis:

- the gender of their patient's sexual partners
- whether their patient is in a sexually monogamous relationship, if not the number of different sexual partners in the last six months.
- whether their patient is having sex with a partner who is either HIV infected or of unknown HIV status.

This can be done in a brief amount of time and yield information that may facilitate more effective testing and guide client-centered, risk-reduction counseling and other behavioral interventions.

Studies have shown that while patients are often reluctant to initiate discussion of sexual matters themselves, many feel greater confidence in providers who ask about sexual health issues.

A sample script for discussing risk behavior with patients is as follows:

> "*We have talked a lot about your physical health but it is equally important to talk about your sexual health. I'm going to ask you a series of questions about your sexual behavior. I ask these of all my patients to help me make the best decisions about any possible tests we may need to run, and how to take better care of you. Everything we discuss will remain strictly confidential."*

Important questions to ask during a discussion of sexual health include:

Have you been sexually active since I last saw you?
Do you have sex with men, women, or both?
How many sexual partners have you had since our last visit?
Do you know the HIV status of your partner(s)?
In the past year, have you had oral, vaginal or anal sex?
For each of these activities, did you use condoms (never, sometimes, most of the time, or always)?
In the past year, have you had any STDs?
In the past year, have you used any recreational drugs?

The key to asking these questions is to recognize that while you may have opinions about different risk behaviors, your primary goal is to elicit as much information as possible. Therefore, practice asking these questions in a neutral and non-judgmental tone, as if you were asking someone to describe the last book he or she had read.

Screening Recommendations

Gay or bi-sexual men who are not in a mutually monogamous relationship should be screened for syphilis and other sexually transmitted diseases (STDs) and HIV every 6 months. Screening may be more frequent for those who use illicit drugs, engage in commercial sex, or have high rates of sexual partner exchange, which is sometimes facilitated via the internet.

5. DIAGNOSTIC TESTING

Types Of Tests: The direct examination of mucocutaneous lesions for spirochetes by darkfield analysis (DFA) is the definitive method for diagnosing primary and secondary syphilis.

If DFA is not available, the presumptive diagnosis of syphilis can be established by the tandem use of two types of serologic tests for syphilis (STS): a positive non-specific non-treponemal serologic screening test (RPR or VDRL), that is confirmed by a specific anti-treponemal antibody test such FTA-ABS or MHA-TP. [1]

Interpretation of Serologic tests: An RPR or VDRL and an FTA-ABS or MHA-TP serology tests should be obtained for patients with clinical symptoms of syphilis.

- RPR or VDRL may not be positive in a small percentage of patients with primary syphilis, but the FTA-ABS or MHA-TP will often be reactive prior to a positive RPR or VDRL test.
- A non-reactive RPR/VDRL does not imply that patient is not infected or infectious.
- Signs and symptoms of syphilis coupled with the results of serology tests for syphilis will determine the diagnosis of the patient.

All patients diagnosed with syphilis should have an HIV test. If a patient is co-infected with syphilis and HIV, then an evaluation for possible neurosyphilis or syphilitic eye disease is recommended.

6. PARTNER MANAGEMENT

Referral of partners of syphilis patients for medical management and treatment are key components in syphilis prevention and control. Partner referral provides an opportunity to break the chain of infection by preventing re-infection of the patient and by preventing the spread of infection to other individuals, which ultimately will decrease the disease incidence in the community.

All patients with a known exposure to primary, secondary or early latent syphilis within 90 days should be prophylactically treated regardless of the serologic result because the RPR or VDRL may be falsely negative. In addition to ordering RPR or VDRL tests, FTA-ABS or MHA-TP test must be ordered.

Persons who are exposed greater than 90 days before the diagnosis of primary, secondary, or early latent syphilis in a sexual partner should be treated presumptively if serologic test results are not available immediately and the opportunity for follow-up is uncertain.

All sex or needle-sharing partners within the preceding three (3) months for a primary syphilis, six (6) months for secondary syphilis, and one (1) year for early latent syphilis should be clinically and serologically evaluated for early syphilis.

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[1] *The Venereal Disease Research Laboratory Test (VDRL) or the rapid plasma reagin (RPR) tests are the two commonly used non-specific screening tests. The two commonly used confirmatory treponemal tests are the fluorescent treponemal antibody absorbed (FTA-ABS) or the microhemagglutination assay for antibody to T. pallidum (MHA-TP).*

Long-term sex partners of patients with late syphilis should be evaluated clinically and serologically for syphilis and treated based upon the examination results.

Providers should inform their patients infected with syphilis that the Hawaii DOH will contact them to ensure adequate follow-up and partner management. Client-centered counseling by the DOH are provided by DIS who have been trained to respect the patient's and their partners' confidentiality. They are also available to assist in patient education and partner counseling and referral.

We request that you routinely ask patients with primary, secondary, or early latent syphilis, within 3 months, 6 months, or 1-year, respectively, of diagnosis to provide:

1. Name and locating information of the patient's sex partner(s) for referral and medical management.
2. Where they or their sex partners have traveled.

For assistance, contact the DIS supervisor at (808) 733-9281. For all cases of syphilis, a DIS will contact your patient to obtain additional information necessary for public health investigation.

7. REPORTING

Syphilis, gonorrhea and chlamydia are notifiable sexually transmitted diseases. Immediately notify the STD Prevention Program office of any case of syphilis pending laboratory confirmation. All cases of suspected or confirmed syphilis should be reported within 3 working days.

The phone number to report any notifiable STD is 808-733-9281.

REFERENCES/RESOURCES

1. Administrative Rules Title 11, Chapter 156. www.hawaii.gov
2. HIPAA www.cdc.gov
3. Bolan, G. "Healthcare providers' role in syphilis control". Health News. Medical Board of California Action Report. Feb 2003
4. CDC Sexually Transmitted Diseases Treatment Guidelines 2002. MMWR Recommendations and Reports. Vol 51. No.RR-6. May 10, 2002. www.cdc.gov/STD/
5. For diagnostic tools, clinical courses on syphilis, and primary and secondary syphilis algorithms, visit the California STD/HIV Prevention Training Center at: visit www.stdhivtraining.org/cfm/resources.cfm